

widely scattered remains of a developmental series, the intermediate members of which, perhaps, lie buried in deposits now immersed beneath the sea, or which are to be found only in uninvestigated parts of the earth. That under such conditions the construction of genealogical trees must for the present, at least, remain an equally unprofitable and thankless task need hardly be said.

[To be continued.]

LIV.—*Description of a new Genus and Species of Cicindelidæ allied to Tetracha, from South Africa (Coleoptera Geodephaga).* By CHARLES O. WATERHOUSE.

THE very interesting addition to the family Cicindelidæ here described was obtained by Mr. Thelwall at Lake Nyassa in South-eastern Africa, and, as will be seen from the following characters, is intermediate between *Megacephala* and *Tetracha*.

STYPHLODERMA, gen. nov.

General characters of *Tetracha*. Apical joint of the palpi much more securiform than in *Tetracha*. Elytra rather depressed, elongate-ovate; shoulders completely effaced. Wings none. Anterior tarsi of male with the first three joints only slightly dilated; posterior tibiæ with two or three slight grooves above. Abdomen with seven segments in the male, the penultimate segment emarginate.

The anterior tarsi in the male of this insect resemble those of *Megacephala*, with which it agrees also in being apterous; but in its other characters it agrees more nearly with *Tetracha*. From this latter it differs in the form of the anterior tarsi, in being apterous, and in having the apical joint of the palpi much more securiform.

*Styphloderma asperatum*, sp. n.

Nigrum, subnitidum; genis æneis, palpis pallide piceis; thorace postice parum angustato, convexo, supra antice posticeque æneotincto et tuberculato, disco glabro; elytris elongato-ovalibus, parum convexis, depressiusculis, subviolaceo-nigris, dense rugose asperato-tuberculatis, singulis guttis duabus ferrugineis; tarsis piceis.

Long.  $10\frac{1}{2}$  lin., lat. 4 lin.

Head nearly smooth, with a shallow metallic impression at

the base of each antenna; cheeks green. Thorax rather narrower than the width of the head across the eyes, convex, narrowed at the base, the anterior and posterior borders metallic, sprinkled with roundish tubercles; the disk gibbous. There is an obtuse tooth at the side just before each posterior angle; the base is gently arcuate, not lobed in the middle. Elytra narrowed at their base, dull black, slightly tinged with blue, the surface densely covered with conical tubercles which are directed backwards; each elytron has a small rusty spot near the base and another near the apex. The elytra are connate.

*Hab.* S.E. Africa, Lake Nyassa.

Brit. Mus.

A female example in Mr. Janson's collection has the elytra more ample, immaculate, and the sutural angle blunted.

LV.—On a Carboniferous Hyalonema and other Sponges from Ayrshire. By Professor J. YOUNG and Mr. J. YOUNG, F.G.S.

[Plates XIV. & XV.]

THE rotten limestones of Cunningham Baidland, near Dalry, in Ayrshire, were well known to Glasgow geologists, but, singularly enough, the value of their contents was unknown till the spring of 1876, when Mr. John Smith, of the Eglinton Ironworks, Kilwinning, washed the powdery débris and obtained, besides brachiopods, corals, &c., a quantity of sponge-spicules, which he submitted to us for identification. We exhibited Mr. Smith's collection to the British Association at its Glasgow Meeting in Sept. 1876, and in autumn to the Natural History Society. As no siliceous sponges had previously been found in our Carboniferous strata, we referred the spicules provisionally to M'Coy's Silurian genus *Acanthospongia*. In the same strata *Serpula parallela*, M'Coy, is abundant; and as a continental palæontologist, whose name we have unfortunately lost, had already identified this fossil as a glass sponge allied to *Hyalonema*, we suggested that the spicules and the glass rods might possibly be found to belong to the same organism.

In the 'Catalogue of Western Scottish Fossils,' prepared for the British Association Meeting of 1876, one of us briefly referred to the spicules and our conjecture of their being a part of a *Hyalonema*; but, in defect of direct evidence, the fossils were catalogued "*Acanthospongia Smithi*," Y. and Y.,=